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(See Editorial, Page 4)

JULY
1950

TREATMENT FIT FOR A KING

—Page 10

PAN-AMERICAN fisherman

LOUIS A. BIANCHI
People and Diesels

—Page 12

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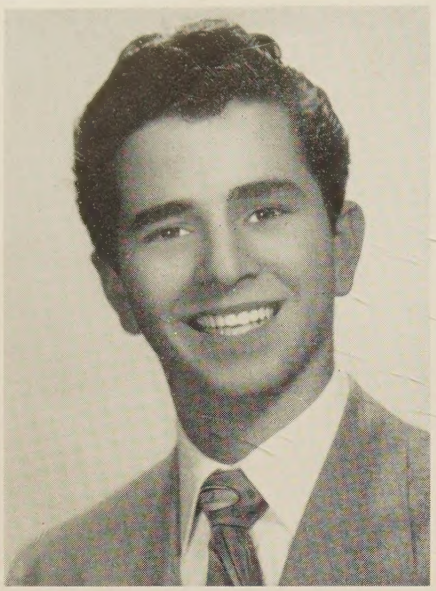

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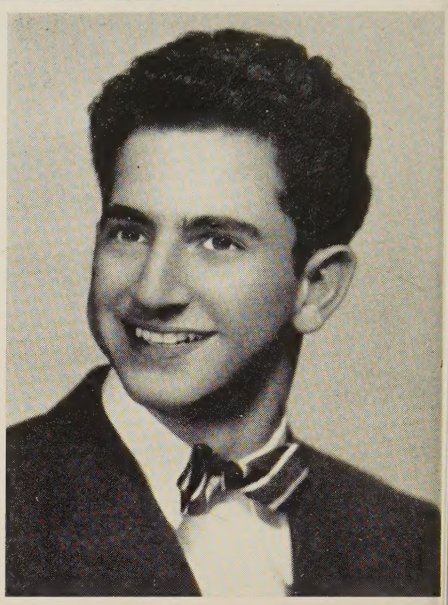

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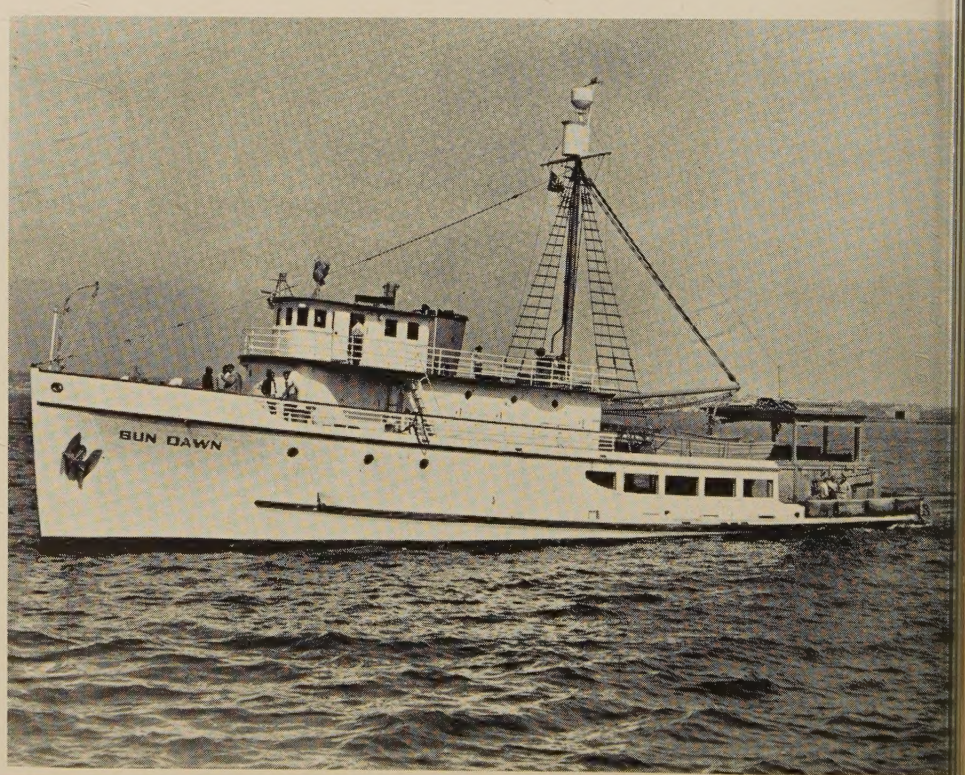

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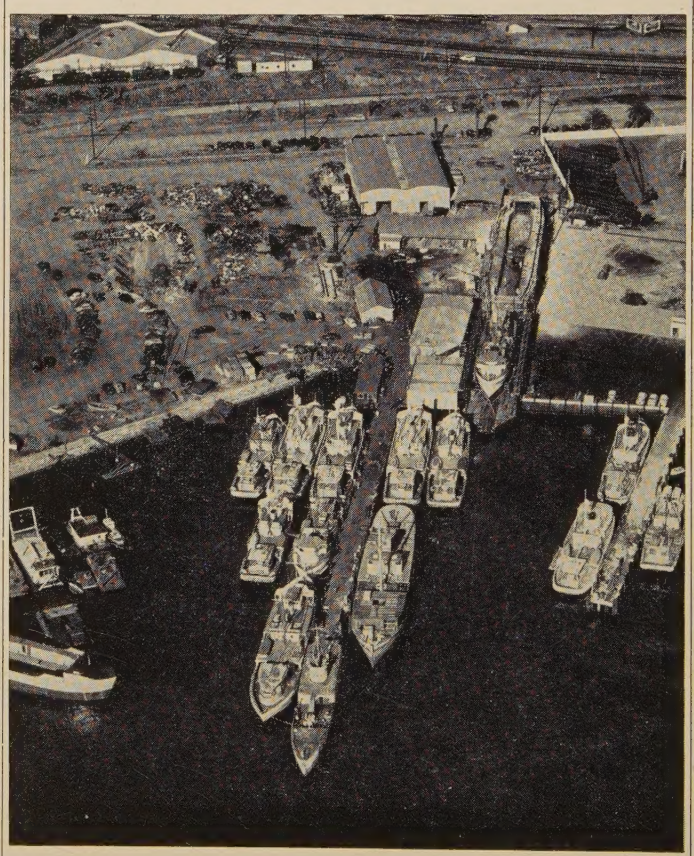

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NEWSmagazine of PAN-AMERICAN FISHERIES
combined with the magazine TUNAfisherman

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Serving the Pan-American Fisheries

A Marine Press Publication

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Volume 5 Number 1

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ABOUT THIS ISSUE:

YOU will notice on page 10 of this issue an article on the canning, cleaning and cooking of crab meat. We enjoyed it; an informative treatment all the way through. The writer is John R. Dassow, a chemist attached to the Fishery Technogical Laboratory, Branch of Commercial Fisheries, Seattle, Washington. Mr. Dassow had some thanks and acknowledgments to make, and we are glad to print them here. "Acknowledgment," he says, "is made to Norman Wigutoff, Fisheries Marketing specialist, Fish and Wildlife Service, Ketchican, Alaska, and to Carl B. Carlson, Chief of Exploratory Fishing Section, Pacific Oceanic Fishery Investigations, Fish and Wildlife Service, for assistance in compiling these recommendations and for preparation of experimental packs aboard the *S. S. Pacific Explorer* in the Bering Sea during 1948."

•

Among the several species of tuna which make up the commercial pack in the United States, the albacore, *Thunnus alalunga*, the white-meat tuna, is the most highly prized. Although this fish has been caught commercially in California waters since the beginning of the tuna industry, it was not until the summer of 1937 that albacore were landed in commercial quanities in Pacific Northwest waters. In 1938, the first sizable pack was put up in Oregon and Washington, and since that time an ever-increasing number of boats have been engaged yearly in tuna fishing off the northwest coast. In the summer of 1948, the Canadian Department of Fisheries patrol vessels discovered sizable concentrations of albacore in waters off the Queen Charlotte Islands, thus opening up new territory to the fishing fleet and indicating that the commercial range of the albacore was much more extensive than was formerly believed.

To study further the range of the albacore and to explore the possibilities of establishing a commercial fishery for tuna off the Alaskan coast, the Exploratory Fishing and Gear Development Section of the Branch of Commercial Fisheries, U. S. Fish and Wildlife Service, sent the 100-foot all-steel tuna clipper *Oregon* out of Seattle on August 8, 1949. Alaskan trollers had landed considerable tonnage of albacore at Ketchikan in 1948. Although the greater portion of these fish was taken in waters south of Dixon Entrance, numerous reports of tuna being sighted and actually caught in Alaskan waters lent support to the belief that possibly an untouched fishery existed offshore at certain times under favorable conditions. Alaskan salmon trolling vessels are easily convertible to tuna fishing, and the advantages to the economy of the region if a tuna fishery could be established to supplement other existing fisheries, are indeed great enough to justify a full-scale investigation by a vessel suitably equipped to study both fishing and oceanographic conditions of the area. Because of unavoidable delay in securing the use of the *Oregon* for the proposed operation, work in the year 1949 did not begin until the tuna season was well under way. Even so, it was felt that the information to be gained concerning the habits of the albacore and the oceanographic data obtainable would constitute a valuable beginning for future studies to determine if an albacore fishery can exist off the Alaskan coast. The results, in part, are on page 9.

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Our friend, Dr. J. L. Kask, Chief Biologist, Fisheries Division, FAO, United Nations, is back this month with the concluding article on *Some Aspects of World Fisheries*. We thought Dr. Kask's opinions more than interesting, and, as we mentioned last month, the first installment of his analysis may be had by writing to Circulation Department, *Pan-American Fisherman* magazine, 205 Broadway Pier Building, San Diego, California. He's on page 13.

•

Incidentally, while we're on the subject of interesting people, don't fail to turn to page 12.

BILLS and BONERS

Adding to the fond indulgence of the Japanese commercial fisherman's True Pal, General Douglas MacArthur, who, very recently, extended Nippon's fishing territories even farther than was remotely reasonable, and the State Department's senseless refusal to do something about the import quota system, comes an administration dandy that could be a beautiful finishing touch for an American industry that already is staggering. This wallop is encapsulated in two Bills, both of which are little short of weird, and both authored by legislators who have become famous for works of this nature. The measures are known as Senate 3680 and HR 8692. The Bills are identical, and were introduced by Congressman Jackson and Senator Magnuson of Washington state. Charles E. Jackson, General Manager of National Fisheries Institute, Washington, D. C., has covered their meanings. "Never," writes Jackson, "has the American fishing industry been confronted with such dangerous legislation." At any rate, here is Magnuson's Bill in part:

A BILL

To provide for the conservation of natural fish resources and for an adequate and balanced flow of fish and fish products in interstate and foreign comerce, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that this Act may be cited as the "Fisheries Stabilization Act of 1950."

DECLARATION OF POLICY

Sec. 2. It is hereby declared to be the policy of Congress to promote the maximum production of fish, both vertebrate and invertebrate, and products thereof (herinafter referred to as "fish and fish products") consistent with conservation of our fishery resources, to provide our fishermen with a fair and compensatory return for their labor, to narrow the gap between prices received by our fishermen and prices paid for fish and fish products by consumers, and to provide an adequate supply of fish and fish products at fair prices for our armed forces and for our domestic and export needs.

TITLE I—PRICE SUPPORT

Sec. 101. (a) The Secretary of the Interior (hereinafter called the "Secretary") is authorized and directed to make available to cooperators price support for each of the various kinds of fish at not less than 90 per centum of its parity price. *The various kinds shall be determined by the Secretary.* The parity price of each kind shall be determined in the manner provided for agricultural commodities, except that (1) *the prices of the commodity used in computing its adjusted base price shall be those received by fishermen and shall be determined by the Secretary,* and (2) no *transitional parity price* shall be determined or used. The Secretary is authorized to make such price support available for fish products as he may deem to be in the interest of the United States.

(b) A "*cooperator*" with respect to any kind of fish shall be a *fisherman* complying with all programs under this Act relating to such fish and with such other requirements relating to such fish as the Secretary may impose in order to carry out the purposes of this Act. *Such requirements may include restrictions as to fishing seasons, gear used, and other relevant matters.*

(c) The Secretary shall provide the price support authorized or required herein through the Fisheries Stabilization created by this Act, by means of loans, purchases, and other operations.

(d) *Marketing agreements* or orders under this Act *may be required as a condition of price support in any area.*

(e) The level of price support for each kind of fish during each year shall be determined upon the basis of its parity price as if such date or dates during such year as the Secretary may deem suitable.

(f) *Appropriate adjustments may be made* in the *support price for any kind of fish or fish product for differences in grade, type, quality, location, and other factors.* Such adjustments shall, so far as practicable, be made in such manner that the average support price for such kind will, on the anticipated incidence of such factors, be equal to the level of support determined as provided in this Act.

Sec. 102. (a) *Whenever the Secretary has reason to believe that any article or articles are being or are practically certain to be imported into the United States under such conditions and in such quantities as to render or tend to render ineffective, or materially interfere with, any loan, purchase, or other program or operation undertaken by the Department of the Interior, or any agency operating under its direction,* with respect to any fish or fish product, or to reduce substantially the amount of any product processed in the United States from any fish or fish product is being undertaken, *he shall cause on his own motion or on the motion of interested fishermen or processors* an immediate investigation to be made by the appropriate office or agency of the United States Department of the Interior responsible for the administration of the affected program, which shall give precedence to investigations under the section to determine such facts. *Such investigation* shall *be made after due notice and opportunity for hearing to interested parties,* and *shall be conducted subject to such regulations as the Secretary shall specify.*

(b) If, on the basis of such investigation and report to him of findings and recommendations made in connection therewith, the Secretary finds the existence of such facts, he shall certify to the *President such facts and the President may by proclamation impose such fees not in excess of 50 per centum as valorem or such quantitative limitations on any article or articles which may be entered, or withdrawn* from warehouse.

(c) *The fees and limitations imposed by the President by proclamation under this section and any revocation, suspension, or modification thereof, shall become effective on such date as shall be therein specified,* and such fees shall be treated for administrative purposes and for the purposes of section 32 of Public Law Numbered 320, Seventy-fourth Congress, approved August 24, 1935, as amended, as duties imposed by the Tariff Act of 1930, but such fees shall not be considered as duties for the purpose of granting any preferential concession under any international obligation of the United States.

TITLE II—FISHERIES STABILIZATION CORPORATION CREATION

Sec. 201. (a) *There is hereby a body corporate to be known as the Fisheries*

(*Continued on page 16*)

The GLOBE

An International News
File compiled by
FOREIGN BUREAUS
of
Marine Press Association

Tovkussak, Greenland.—Det Gronlandske Fiskeri-Kompagni was founded early in February with a share capital of 2 million Danish kroner (approximately $416,-000). In the course of two years, this company has built a fishing and freezing station at Tovkussak, situated between Godthaab and Sukkertoppen on the West Coast. Long-distance fishing has been carried on from this station with ten small motorboats and with a fishing and freezing vessel of 300 metric tons (the Greenland), according to an article in the March 1950 issue of Konserves, a Danish canning periodical.

From June to September 1949, the Greenland produced, with a crew of 26 men, 294 metric tons of wet-salted cod, 58 tons of quick-frozen cod fillets, 10.6 tons of frozen halibut, and also liver oil.

In addition, production at the land station in the summer of 1949 amounted to 177 metric tons of wet-salted cod, 73 tons of quick-frozen cod fillets, and 18.6 tons of frozen halibut.

Although the present fishing season is from June through September, it is expected that operations can be expanded over most of the year.

Fillets are packed in cellophane-lined, paraffined cartons and frozen in 6½-pound blocks, but 1950 production will be packed in smaller units, which are believed to be more readily marketable.

Splitting and salting of cod and cutting of fillets require considerable labor. The yield of the finished product represents about 30 percent of the round fish in each instance and the amount of labor is about the same for an equal weight of salted or filleted cod. Since the available labor can be used more effectively in fishing operations, it probably will not be long before the first splitting and filleting machine wlill be used.

Plans are underway for installation of a fish meal plant, together with an oil recovery unit, at Tovkussak. In addition to herring and rosefish, which contain considerable oil, other oily fish include sharks and capelin. The latter two are present in appreciable quantities. In addition, the fishery for rosefish probably can be expanded. Consideration has also been given to an artificial drying plant for salt cod.

Fishing will be greatly increased during the 1950 season as a number of big boats will be fishing from the station. In order to facilitate the work, the station will be equipped with mechanical conveyors.

Emphasis has been placed on freezing fishery products since the transportation of fresh Greenland fish to the United States or Europe is precluded by the long distances involved. Freezing has made it possible to preserve herring for bait, and halibut which otherwise are worthless. The same is true of wolffish which is of no value when salted, but makes a frozen fillet equal to cod in appearance and taste. Salting, on the other hand, has disadvantages in that in the winter it must be carried on in heated rooms. As a result, the handling of cod has had to cease during the winter months. Filleting, however, has a significant advantage in this respect since it can be carried on throughout the winter. Although frozen fillets are somewhat more costly to produce than salted cod, because of the freezing and packing operations, the prices for these fillets are higher than salt fish, and the difference is enough to overcome the increased production costs of frozen fillets. Also, the market for salted fish is limited and the purchasers are among the less wealthy nations; whereas, Iceland can figure on the United States, for one, as a market for prime quick-frozen cod fillets in attractive consumer packages.

Since there is a large market for frozen headless shrimp in the United States, Greenland's exports of shrimp could make it the next most important export article to cod. The shrimp fishing areas supplying the Holsteinborg and Narssak canneries are minor compared to the shrimp grounds discovered by Paul Hansen, a fishery biologist for the Greenland Commission who has conducted research in Greenland waters for almost a generation. He has characterized these resources as among the richest in the world. These newly-discovered shrimp grounds are about 25 nautical miles long and about 4 to 6 nautical miles broad at a depth of 400 meters. The bottom is smooth clay without stones. In addition, shrimp are found outside these grounds in a large area where they cannot be fished. Thus, the shrimp are naturally conserved, since eventual overfishing on the areas with a smooth bottom will be compensated for by the migration of shrimp from the areas with a rough bottom.

Oslo, Norway.—Norwegian chemists have discovered a satisfactory way of producing "egg white" or albumen from fish and fish waste, according to a report from the Norwegian Information Service. Before the war, the Germans were producing a similar product, but it was not sufficiently pure to win favor in the world market, in competition with egg white produced from milk, peanuts, coconuts, soyabeans, etc. The German product tasted and smelled too much of fish.

The pure Norwegian product now achieved is the result of cooperation between two firms. Trial production has been started at the rate of 600 pounds of dried egg white a day, equal to the daily out-put of 100,000 chickens. Production is carried out by a completely chemical-mechanical process. One gram, or one thirtieth of an ounce, of the powder is sufficient to produce 3 to 4 pints of "cream," which whips and mixes easily. In several respects the artificial product is claimed to be better than natural egg white, and one pound of it is equivalent to that contained in about 150 chicken eggs. The product contains 80 to 90 percent pure protein and can be used for baking, ice cream, puddings, fromage, soup powder, mayonnaise, pharmaceutical products, in paints and varnishes, in the textile industry, as well as for paper, cosmetics and soap. A price of about $2.50 per pound is indicated for the best quality.

Oslo, Norway.—The first Norwegian floating herring oil and meal factory, which went into operation in January this year, has been a great success according to all reports. The factory has a capacity of some 370 metric tons of herring per each 24-hour period.

EBB 'N FLOW

Confrere

Dr. Wilbert M. Chapman, Special Department Assistant for Fisheries. (See "State of Industry," this page).

STATE OF THE INDUSTRY

Warnings:

Cecil King, Democratic Representative of San Pedro, California, gave the warning. The State Department, he lashed out, must learn that increasing imports of canned tuna from Japan have posed a serious threat to the domestic commercial fishing industry. He summoned three Department officials to relay the fear of Southern California fishing industry leaders if Japanese exports continue to increase. Conferring with King were Dr. Wilbert M. Chapman, special department assistant for fisheries; John Allison, director of the Office of Northeast Asian Affairs, and Thayer White, department economist.

King cited facts and figures on Japanese exports to show that a real danger exists from the standpoint of the tuna industry at San Pedro and San Diego.

The Californian bluntly told the department officials that if restrictions were not imposed on Japanese fishery exports San Pedro's reign as the world's leading fishing port would be jeopardized seriously.

"And we can't afford to peril our domestic fishing industry through unrestricted imports," King declared.

He pointed out to the department officials that in pre-war 1939, Japan supplied 11 percent of the canned tuna consumed in the United States.

In Harmony:

Meanwhile, Southern California fishing industry spokesmen told the Government that continued tariff cuts on imported fish might run the state's fourth largest enterprise out of business. The warning came from representatives of San Diego and San Pedro canners, fishing boat owners and fishermen's unions in testimony before the committee for reciprocity information. It is gathering data to be used next September when the U. S. and 17 other nations negotiate new reciprocal trade agreements at Torquay, England.

Targets of the fishing industry's testimony were proposed cuts in tariffs on bonito and sardines. Imported bonito, most of which is caught by Peruvian fishermen and canned in Peru, competes in the U. S. with domestic tuna caught by San Diego and San Pedro fishermen and packed by canneries in those cities.

Don Loker, labor relations director of the French Sardine Co., Terminal Island; Harold F. Cary, general manager, American Tunaboat Association, San Diego, and Herbert Davis, operator of the Terminal Island Packing Co., attacked proposed cuts in bonito and sardine tariffs.

Loker, who said he also had been asked to represent the California Fish Canners Association and Southern California C.I.O. and A.F.L. fishermen's unions told the committee the government should boost tariffs on imported bonito, tuna and sardines instead of cutting duties on bonito and sardines.

More Coals:

Then a new thrust appeared. Rep. Mitchell (D-Wash) accused the tariff commission of shirking its duty in not investigating imports of fish products. Mitchell made public a letter to Oscar B. Ryder, chairman of the commission, in which he said the commission's own regulations provide for such investigations whenever imports injure an American industry.

Mitchell wrote that imports of fish fillets have increased from 3,000,000 pounds to 67,000,000 pounds annually in the last 20 years, that domestic production was supplying only 77 percent of the demand now as compared with 96 percent previously.

"It is for you to keep the nation informed as to the reciprocal meaning of the steady decline in ad valorem duties which have allowed Canada to increase its exports of fish fillets to 61,000,000 pounds in 1948," Mitchell said. "The present ad valorem rates offer almost no hindrance to imports but only on basis of full facts such as you are charged with supplying the nation, can we know the full meaning of the program." Mitchell said that vitamin manufacturers now can purchase concentrated fish oils in several countries cheaper than they can buy fish livers from American fishermen.

FINALE

From Monterey:

The pressure, however, was not yet to be lifted from the Gentlemen of the Department. George Clemens, Executive Secretary, Monterey Fish Processors Association, appeared before the Committee For Reciprosity Information, and added something for them to mull over.

"I speak," he said, "for the Monterey Fish Processors Association, Monterey, California, of which I am Executive Secretary. Our Association represents fifteen of the eighteen sardine canning plants located at Monterey, California. Two non-member plants have also authorized the Association to speak in their behalf, while the remaining cannery is inactive at present.

"Under date of May 13, 1950, our Association filed a brief with your Committee, in which we opposed the lowering of the import tariff on canned sardines, not in oil. Today, we reaffirm the opposition, and urge that the tariff rate be increased so that our industry will have better protection than exists today. We particularly call to your attention the fact that the American sardine fisheries industry already has an operating capacity in excess of the domestic market requirements, and consequently a reduction in the import tariff will result in corresponding increases in canned sardine imports which will simply mean the curtailment of production in this country.

"Let us look at what happens when fishing and processing of sardines are performed on a limited scale. First, the fishermen feel that they must get more money for their smaller catch in order to make ends meet and make a fair profit; secondly, canneries operate more efficiently on a volume basis. The more the processor or canner pays for the raw product, the greater the cost to the consumer.

"How About Us?"

"As the initial raw material cost increases, labor says 'how about us?' Higher costs for canned sardines bring this historically low-cost food into competition with other species of fish as well as meat, which simply aggravates an already bad situation. Naturally, the

answer to the problem is to increase the demand. This cannot be done overnight, and it most certainly cannot be done by bringing foreign canned sardines to the U. S. grocery shelves. Plans are being considered to spend large sums of money to educate more of the American housewives into using canned sardines as a part of their daily diet. If such a program become effective, we certainly do not relish the thought of having our foreign competition reap any of the benefits.

"Particularly, let us bear in mind that, in our benevolence to other countries we have developed a Frankenstein for the sardine fisheries industry of the United States which threatens to bring further chaos to an already stricken industry.

"We simply cannot expect to retain the typical American high standards of working conditions which the workers and fishermen in the industry enjoy if we throw open our doors and ask for an avalanche of canned sardines produced under a totally different standard. In Monterey, the minimum wages are $1.37 per hour for women,, and $1.44 per hour for men. The workers who print the labels, process the tomato sauce, make the cans, and the thousand and one other items, also contribute to higher cost of U. S.-produced sardines, as compared to foreign labor standards. This might appear as if the processor is thinking of subsidy, but this emphatically is not the case. We like and prefer the system of free enterprise and only ask that we be given a fair and reasonable opportunity to carry out our ideals. Foreign importations of canned sardines could eventually close down the sardine nidustry.

Statistics:

"This is possibly a good place to elaborate and enlighten the Committee on how far-reaching the consequences of curtailment or shutdown of the sardine fisheries could be to a community. We use Monterey as the example, and other fishing ports might be compared to it in almost exact detail. The canning plant investment in Monterey, California, is approximately $15,000,000. The fishing fleet investment is approximately $5,500,000. Then we have various services to the fishing industry, ship chandlers, repairs, fuel and food, and on and on. It is quite safe to estimate that the fishing industry contributes twelve to fifteen million dollars to the economic well-being of Monterey each year. To a population of 20,000, this means a lot.

"The fishing fleet employs approximately 800 men and the fish processing plants approximately 3,000 men and women. Most of these people, with their families, have no other means of making a living, and they would be ill-equipped to make a change, if it became necessary for them to seek another type of employment. These people are the type who make good community citizens, they take pride in improving themselves and their surroundings, which means that they contribute much to the economic well-being of the community. Large amounts are spent by the sardine processors in payrolls, fish purchases, allied services, and in city, county, state and federal taxes. Let us go back to the fisherman and his vessel for a minute; the fishing fleet, some sixty vessels or more, is each a small business in itself. We are not talking about five or ten thousand dollars each, but of $35,000 to $125,000 each. The nets alone are valued at from $10,000 to $15,000 each, in addition. The vast majority of the vessels fall in the latter category. Each purse seine vessel employs, on a share basis, 10 to 12 men.

Backing:

"When one stops and considers how far-reaching the processing plant and fishing fleet expenditures are — 'the butcher, the baker and the candlestick maker'—it might be truly said that without the fishing industry, a community such as Monterey would suffer a terrific loss if the sardine operations are temporarily curtailed, let alone shut down, because the industry cannot cope with foreign prices.

"I have also been authorized to speak for and on behalf of the Monterey Purse Seine Association, which organization has wired you direct on the subject matter. Therefore, everything we have said, and stated in our brief, is hereby submitted as the position of the Monterey Purse Seine Association and the Monterey Fish Processors Association. The Monterey Purse Seine Association is an association of boat owners whose members own practically all of the Monterey fishing vessels which supply sardines to the processing plants in the Monterey area.

"We have submitted our case in our brief of May 13, and today's statement. In presenting the sardine fisheries case, we sincerely hope and trust that we have been able to convey to the Committee members some idea of what restricted production means to the fishermen, the cannery worker, the boat owner, the processor, the allied industries, and the city, county, state and federal income."

INVESTIGATOR

Another Afloat:

The USFWS *John N. Cobb* left Seattle, Washington on an extended exploration for albacore. This is a continuation of work started last year. The exploration will continue for approximately four months. An attempt will be made to intercept the tuna at an early stage of their inshore migration, while they are still offshore from Washington and Oregon, and to trace the speed and direction of their movements, especially in the direction of Alaska. Commercial possibilities will be appraised at all stages of the survey. The *Cobb* will fish with usual commercial gear such as surface trolled jigs and live bait, and also use both linen and nylon gillnets, in an attempt to determine the vertical distribution of these fish. Longlining and deep trolling for tuna will also be tested, when conditions permit. Oceanographic and other scientific information related to the problem will be collected. A daily broadcast of findings will be made from the vessel to the fishing fleet.

ENTERPRISE

At Los Angeles:

Plans for the construction of a $2,000,000 Continental Can Company plant and warehouse to be built in Los Angeles harbor were revealed when the Los Angeles Board of Harbor Commissioners received an application for 6 (six) acres of land on Terminal Island. The two story plant, which will employ at least 50 persons, will manufacture metal containers and according to the application, a railroad spur will be built adjacent to the plant. The manufacturing site is in the heart of the cannery and shipping district on Terminal Island, although the company expects to manufacture various types of containers for us in the West. Los Angeles harbor is the world's largest fishing port with an annual gross business of approximately $100,000,000 a year. In

(*Continued on page 14*)

Tariff Boost Booster

Donald P. Loker of French Sardine Company, Terminal Island, California. (See "State of Industry," page 6).

Press-O-Grams

With HAP HOLLIDAY and PHIL BERTRAM

Holliday

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Arno Mueller, prexy of Mueller Trucking Company is evidently very optimistic about the future of San Diego's tuna industry, and just to prove it Arno has taken over the Acme Trucking Company, thereby adding nine units to his present fleet. . . . Ed Boilard, who has taken snapshots of the fiestas for many years, turned this year's negatives to Bunnell's Photo Shop with the same stipulation as in the past, that the price be no more than the cost of the prints. . . . Joe Ferreira, skipper of the *Ronnie S*, and his wife recently departed by plane for a visit to the Madeira Islands. . . . Joe Medina is also in the old country on a goodwill tour to assist his home town people in establishing a reduction plant. . . . The San Pedro *News Pilot* in a recent issue really gave San Diego harbor a boost. It carried a full page ad showing the crowded conditions in the Los Angeles harbor, and the slips that the small boats have access to in the Point Loma area. It was taken out by the Southern California Fishing Boat Owners, Inc. . . . Joe Charleton planed in from Pascagoula recently for a brief stay. Joe stated that the Menhaden reduction plant will be in operation any day.

Here's one that's too good to keep. Seems about a few days ago a group of the leading waterfront personalities planned a fishing trip off the point for rock cod. They spent a whole week making the plans and getting the boat ready. At four o'clock in the morning Frank Medina, Joaquin Medina and Joe Rogers, who may well be called top fishermen in anybody's fleet, along with George Campbell, his son-in-law, Tommy, and Julius Zolezzi boarded George's boat and headed for the point.

Everyone knows that George Campbell and Tommy are top men in the boat repair business, and that Julius Zolezzi is well known as the "rock cod king." The way we hear the story is that they stopped at Ballast Point to get anchovies for bait. Joe Rogers remarked to Julius that maybe they should buy something larger for bait, in case their luck was not too good and they needed to fry something for lunch. Of course Julius informed Joe that he was the "rock cod king"; that there would be plenty of rock cod, and that he would personally make *genevesa* for lunch. We don't know whether there is a moral to this story or not, but, at the end of the day, Julius nor anyone else had produced any fish, the boat had broken down, and George and Tommy had a very hard time locating the trouble. The only two contented members of the party were Joaquin and Frank Medina who had thoughtfully brought along liquid refreshments.

High Seas Tuna Packing Company returned to operations on June 20th, after being shut down since January 14th. Manuel Freitas' *Lucky Star* was the first boat to unload at the new docks. . . . Harold "Prince" Dempsey, president of San Diego Packing Company, is in San Francisco on a thirty day combined business and pleasure trip. . . . Managing owner of the *Jenita*, G. W. McHenry, delivered some parts to the *Jenita* in Guaymas and wound up spending a week's vacation there. . . . The *Sun Dial* was recently in Panama for repairs on a broken crank shaft on an auxiliary. . . . Augustino Zolezzi's *Morning Star* seems to be the hard luck boat of the fleet. They have suffered a broken cam shaft, suffered a collision with the *Stephen L*, and had a broken main shaft, each time having to be towed home. . . . Frank Brenha, skipper of the *Viking*, almost lost her at the Broadway pier on the same day he arrived in port. A valve became stuck and, luckily, Fernando Medina, skipper of the *Queen Mary*, happened to notice that the boat seemed to be settling below her water line. Fernando immediately called for the fire boat and fortunately the situation was soon well in hand, with only minor damage to the electrical equipment. . . . Paul La Frenier, skipper of the *Fred Holmes*, bagged the first albacore of this season. It was sold to Westgate-Sun Harbor for $280.

Pete Szalinski has some exceptional 16mm color movies of action aboard during some of his fishing trips. Van Camps would like to get their hands on them. . . . Eileen Pickering of San Pedro, and Irma Story of Lancaster, piloting the French Sardine *Starkist* entry in the women's transcontinental air race, placed third. Darlene Sanders and Dodie Prario of San Diego, piloting Van Camp's *Chicken of the Sea* plane, came in for fifth money. . . . Harold Cary, manager of the American Tunaboat Association has been enjoying a vacation at Alpine.

Joe Madeiras, assistant port captain of National Steel and Shipbuilding Company, says he has learned the hard way not to make any rash promises to his wife. It seems Mrs. Madeiras was admiring a friend's fur coat, remarking that she would like to have one. Joe laughingly remarked that a fur coat would look better on her if she weighed a few pounds less. Perhaps Joe was too busy to notice that his wife was loosing weight each week, but, recently, Mrs. Madeiras presented Joe with a little pasteboard slip showing a substantial loss of weight. Mrs. Madeiras' fur coat is really beautiful Joe!

Mr. and Mrs. Gene Cabral assisted their daughter, Connie Jean, at her fifth birthday party by serving refreshments and showing cartoons. . . . Eddie Mad-

(*Continued on page 17*)

Bertram

New Alaskan GOLD RUSH!

(According to this analysis, albacore tuna explorations in Alaskan and adjacent waters has netted some results. At any rate, it's a complete picture, and makes Northwest tuna fishing possibilities look good for the future. This article was prepared by the Fish and Wildlife Service, United States Department of the Interior.)

IN California, from the beginning of the tuna industry until 1925, the major portion of the tuna pack was made up of albacore. After a record catch in that year, the species apparently disappeared from those waters and did not reappear in any quantity until 1938, again assuming considerable commercial importance in the fishery in following years. Since that time, the California landings of albacore have increased until, in 1948 and 1949, the greatest volume of all times was reached, exceeding 43 million pounds the latter year.

While albacore had been taken occasionally by salmon trollers and halibut fishermen off the Oregon coast, it was not until August 1936 that a sardine purse seiner picked up a ton of these fish from a large school a few miles offshore. The summer of 1937 saw commercial landings of albacore being made at Astoria, Oregon, and other northwest ports by numerous trollers, taken incidental to salmon fishing. A commercial pack was put up in Washington and Oregon in 1938, and by 1941 it was estimated that about 500 boats were engaged in albacore fishing during the month of August. Trollers accounted for the major portion of the catch, with seiners and live-bait boats making successful trips occasionally.

An all-time high of 34 million pounds was landed at Oregon and Washington ports in the summer of 1944, and the catch has declined to less than 15 million pounds annually since 1945. Early catches have in recent years been made during the first part of July off the northwest coast, although in some years, the albacore have not appeared until August. October usually sees the last of the tuna landings in Oregon and Washington.

Canadian boats began experimental fishing for albacore off Vancouver Island as early as 1939, and tuna landings at British Columbia ports, while fluctuating greatly from year to year, had reached over a million pounds by 1945. However, most of these fish were caught in offshore waters of Washington and Oregon, and it was not until 1948 that large catches were consistently made off the British Columbia coast. In that year, patrol vessels of the Canadian Department of Fisheries discovered concentrations of albacore far north of the previous commercial range, and both Canadian and American boats found good fishing off the Queen Charlotte and Vancouver Islands.

Rumors of the presence of albacore in Alaskan waters have occurred quite regularly since the mid-1920's. Commercial landings made at Ketchikan in 1948 were composed for the most part of fish taken off the Queen Charlotte Islands, and actual records of catches being made in Alaskan waters are lacking. Reported occurrences of tuna in the Gulf of Alaska have incited considerable interest among Alaskans, notably at Sitka and Kodiak. Salmon traps from Salisbury Sound to Kodiak have reported taking stray tuna. Special effort was expended during the present cruise in investigating a number of these rumors. The evidence found indicates many of the reports are unacceptable and are based upon porpoises at sea and, in inshore waters, on species of fish which are new to local inhabitants, such as the scad, Decapterus polyaspis. Nevertheless, the number and consistency of the reports cannot be entirely ignored or disproved until a complete investigation has been made of the existence of albacore in Alaskan waters.

THE *Oregon* left Seattle on August 8, 1949, fully equipped with several types of tuna fishing gear, scientific equipment for oceanographic studies, and manned by a crew of experienced West Coast fishermen. Main objectives of the work were:

1. To determine the commercial range, abundance and movements of albacore in northeastern Pacific waters, and the effects of water temperature, currents and sea life on the movements of the fish. 2. To expand the known fishing area with the view of possible establishment of an albacore fishery in Alaska on a commercial scale. 3. To report the location of tuna to the fishing fleet by radio. 4. To check the accuracy of reports of tuna in Alaskan waters.

Plan of the program was to work northward to the present known limits of the fishery and attempt to follow any possible movements of tuna into Alaskan waters. Scientific equipment carried to aid in locating the fish included reversing thermometers for studying water temperatures and plankton nets to indicate presence of marine organisms upon which tuna might feed. The *Oregon* was also equipped with the most modern depth-finding apparatus, electronic navigation equipment, live-bait tanks and freezing and cold-storage facilities.

Although tuna fishing off the Canadian coast was done almost exclusively by trollers in the past, live-bait fishing had taken a considerable portion of the catch off the Washington and Oregon coasts in recent years. It was planned, therefore, to use the trolling jigs as the primary means of locating albacore, and to test the possibilities of live-bait fishing if tuna were found schooled in northern waters. First, operations were planned to secure suitable live bait in Washington waters, test the trolling gear in established tuna-producing areas off the Washington coast, then proceed north off the Queen Charlotte Islands and attempt to trace the albacore from there.

Catch records show tuna landings in Washington and Oregon in 1949 were almost equal to those in 1948, but the catch in Canadian waters did not nearly approach that of the previous year. The *Oregon* found albacore scattered from the Washington coast to the Welker Seamount, 300 miles offshore from Dixon Entrance; however, the large concentrations of tuna which afforded good fish-

(*Continued on page 24*)

METHOD

The techniques used in the preparation and handling of king crab are of primary importance in maintaining the quality of the canned or frozen product. King crab meat must be processed with utmost care to insure the maximum retention of color, flavor, and texture. A high quality product can be obtained only if careful attention is given to initial phases of handling the king crab such as holding the live crab, butchering, cooking, cooling, removing the meat, and cleaning. Recommendations are based on observations of experimental and commercial packs. Additional factors pertaining to packaging of meat for freezing and to heat processing are discussed.

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The King

He's become one of America's most popular table delicacies.

Treatment Fit For a King

By JOHN R. DASSOW

ONE of the most recently developed and expanding fisheries on the Pacific Coast is the Alaskan king crab fishery. The king crab (*Paralithodes camtschatica*) is found in the cold offshore waters of central and western Alaska, extending from Prince William Sound to the Alaska peninsula and to the northern part of the Bering Sea. Present information indicates that the waters along the north side of the Alaska peninsula contain the best fishing areas. Prior to World War II, the Japanese were the principal exploiters of this fishery resource, utilizing large cannery ships accompanied by smaller fishing craft. Before 1940 the imports of the Japanese product formed the bulk of the domestic consumption of canned crab meat. American operations have been carried out on a small scale since 1927, but it is only in the last few years that an American fishery for these giant crabs has shown signs of permanent development.

The acceptance of quick-frozen king crab meat by the American consumer has provided much of the stimulus for production. In 1948 more than 200,000 pounds of the frozen king crab meat were produced in addition to 18,000 cases of the canned. Whereas the canning of crab meat requires considerable equipment and technical supervision in order to produce a quality product, frozen king crab meat may be produced with moderate expenditure for equipment and labor. This permits a refrigerated trawling vessel to utilize the fishery resource to advantage. Increasing competition and less favorable marketing conditions in other Pacific fisheries will attract more vessels to the king crab fishery. The present price for the product tends to offset the practical difficulties of operation in areas which are far removed from the ports and marketing areas. The practical aspects of the fishery, including operation of fishing gear, productivity of explored areas, and vessel requirements, were surveyed during 1940-41 and the data have been published in a report of the Alaska Crab Investigation.

The experience gained from experimental and commercial operations in the last few years has demonstrated that the techniques in the preparation and handling of the king crab have a considerable effect on the quality of the canned or frozen product. King crab meat should be processed with utmost care to insure the maximum retention of color, flavor, and texture. A high quality product can be obtained only if careful attention is given to initial phases of handling the king crab, such as, holding the live crabs, butchering, cooking, cooling, removing the meat, and cleaning. Inasmuch as these operations are common to both frozen and canned packs, uniform recommendations can be made.

IN addition, factors pertaining to the final process have been investigated. Although further research on the problems associated with the canning and freezing of king crab is desirable, all findings to date have shown the importance of the recommendations.

The live crabs should be sorted immediately after catching in order to return the females and undersized crabs to the sea. Dead, crushed, and underweight crabs should be discarded. The tissue of the outer leg segments of old crabs which have not moulted for a long time appears to degenerate. These crabs usually have a thick, heavy, barnacle-covered shell which tends to be of a darker color. Experimental packs prepared from such crabs were of inferior quality in comparison with packs from the younger or firmer crabs. The

cooked crab legs should be well filled; the meat should be firm, white with no yellowing, and bright red on the surface next to the shell. Cooked meat from recently moulted crabs tends to have a watery texture but has been found to be satisfactory for canning, except that difficulty may be found in obtaining a proper fill because of excessive shrinkage during processing. The yield of meat from such crabs is much less than that from crabs taken later in the season.

The crabs should be butchered and processed the same day that they are caught. Any crabs which are dead when they reach the butchering table should be discarded.

Although crabs can be held alive on deck for periods up to 48 hours and longer, this practice is not recommended. Evidence obtained from the examination of experimental packs of both frozen and canned meat indicates that a loss of color and flavor is correlated with long holding periods. Discoloration caused by the coagulated blood and body fluid is more pronounced. A possible explanation is that even though the crabs are kept alive and wet with sea water, the accumulation of toxic products from the body wastes tends to affect adversely the quality of the meat noticeable after processing and storage.

THE carapace is torn off and the crab is split into two portions with the assistance of the butchering iron. The gills and viscera are trimmed away and the legs thoroughly scrubbed, using a strong stream of water to loosen adhering material. This step should be carried out with considerable care since contamination of meat with visceral material will cause discoloration and off flavors in the finished product. On the other hand, overzealous scrubbing and cleaning may result in a large loss of valuable body meat.

The butchered crabs should be cooked by placing them in vats of boiling water for approximately 15 to 18 minutes. A batch-cooking process is preferable aboard ship. Continuous cookers present mechanical difficulties in moving the crabs at a uniform rate due to the surge caused by the roll of the vessel. The heating element of the cooker should be of adequate capacity in order that the water will resume boiling within a short time after the crabs are put in the vat. Overloading the cooker, cooking for long periods at low temperature, and undercooking are undesirable procedures. Overcooking tends to shrink the meat excessively and causes a loss of natural constituents. After cooking, the sections should be cooled quickly by dipping them in *clean*, cold water. This quick chill firms and shrinks the meat, making it easier to remove from the shell. Inadequate cooling allows further cooking of the segments and, as a result, the meat is difficult to shake from the shell. Fresh water, about a 3 percent salt solution, or sea water may be used for cooling. The use of sea water is most convenient and practical on small boats but it should be obtained only from open and uncontaminated waters.

The meat may be removed from the crab legs by either one of two methods. In the first method, the joint is torn apart and the soft part of the shell broken away to allow for shaking the meat out. The cartilaginous tendons remain fastened to the shell, and the meat is free of tendon. In the second method, the legs are sawed off on both sides of each joint and then shaken to remove the meat. This is simpler than the other technique; however, the tendons are left in the leg portions and there is a slight loss of meat at the joint. The shakers should remove the meat without undue destruction of the red membrane, since it is a distinguishing and desirable characteristic of the final product. Jamming or poking the meat from the shell, pulling the meat apart, and leaving bits of tendon and shell in or attached to the meat will lower the quality of the pack. Care in picking will simplify the task of washing and cleaning the meat to remove objectionable material. If desired for packaging, the whole leg meat should be separated from broken leg portions and body meat during this operation.

THE curd-like coagulum of protein and blood, bits of shell, pieces of gills, tendon, and visceral particles should be removed as completely as possible during the washing, cleaning, and sorting of the meat. The appearance of the canned or frozen king crab will be affected considerably by the thoroughness of these steps. Any discoloration of the meat due to foreign matter becomes pronounced on processing. The meat is washed either by spraying with water under pressure or by immersion in clean water or weak brine with sufficiently rapid agitation to remove adhering material. The individual sections may have to be washed to remove excessive surface curd. Strong brine can be used for the bath, but in this case the period of immersion should be short so that excessive salt will not be absorbed by the meat. The operator should experiment to determine the most effective technique which insures adequate washing but does not result in excessive leaching or breakup of the meat.

The meat might advantageously be handled for washing, hand cleaning, draining, and inspection in shallow trays or baskets which allow thorough flushing of the meat and removal of the objectionable particles. Before further handling, the meat should be allowed to drain completely. Excessive water introduced into either a processed or frozen pack will produce a high apparent shrinkage or "drip."

(*Continued on page 17*)

Close-up

A full-grown male King Crab packs a lot of meat.

Bianchi

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(From the role of lonely little Italian immigrant to that of one of the West Coast's most popular and successful waterfront figures — that's the story of "Louie" Bianchi. Here's a little of his background.)

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LOUIS A. BIANCHI:

People and Diesels

By JOHN SPRINGER

WHEN Louis A. Bianchi, a bouncy, bull-shouldered, 170-pound Italian-American, who at 41, is a Field Engineer for Washington Iron Works, Seattle, Washington, and one of the most widely-known and liked men in West Coast shipbuilding and commercial fishing, was two years old, he developed, one day, an urge to fix his father's watch. This interest, so the records go, had to do with a fatal interest in the ticking of the instrument, and, of course, had nothing to do with the fact that the watch already kept good time. Lacking the tools held so dear to the hearts of watch repairers here, there, and everywhere, the tousle-topped, heavily-built youngster merely substituted some hefty whacks on the floor for the discrepancy in equipment, which instantly brought on the fatality just alluded to. The watch, violently dispossessed of its springs, wheels and whatnots, caught the eye of Bianchi *pere*, just home from work, and, in the ensuing few minutes, young Louie's pants were subjected to what the English like to call a "caning." The incident, happily, did nothing to lessen his enthusiasm for anything and everything mechanical, although some of his experiences, as time went by, gained him additional familiarity with the rattan. Leaving a backwash of shattered clocks, de-nuded bicycles and un-hinged doors, it was not until his twelfth year that the idea soaked in that some mechanical explorations, to the laymen, were destructive to the family possessions.

Whatever influence these assaults may have had on his current adult character, however, the fact remains that Louie today is one of the best-informed authorities on the subject of Diesel engineering, West Coast-wise. Unlike those earlier experiences, Louie's boss, Washington Iron Works, has never been forced to smack him down. In fact, his career, with each passing year, has been on the upgrade.

LOUIE was born in Angera, suburb of Milan, Italy, in the shadows of the towering, unbelievably beautiful Alps, near the Italian-Swiss border. One of seven boys, his early recollections have somewhat faded, with exception of scraps with his brothers, and the type of clothes in which he was dressed until, at the age of eight, he was brought by his parents, along with the rest of the family, to Black Diamond, Washington, neat Seattle.

"Man," he laughed recently. "You should have seen that get-up! I wore lace collars and Fauntleroy clothes until I was eight. And I'll never forget how I hated 'em! But then, at that period over there, all the kids my age were dressed the same. So I guess I wasn't hurt any worse than the rest."

But the situation changed upon the family's arrival in the United States. Shortly thereafter, dressed in work clothes, the entire group went to work, selling newspapers, working in cafeterias, running errands and sewing, while Louie's father, who had been in the Italian army, returned to mining, a trade in which he had had experience as a boy. Then, about the time the group began to live more easily, tragedy struck. Louie's father was bludgeoned to death by an unknown murderer, who, to date, has never been apprehended. This development, after funeral expenses were paid, left the family penniless. When Louie recalls, however, his mother's courage during those days, his startlingly blue eyes grow a bit softer.

"They wanted to put my brothers and myself in an orphanage," he explains. "But she fought like hell to keep us, and keep us she did. Then we really went to work. She died two years ago, and we never forget what she had done, believe me."

Living in Georgetown, Washington, after his father's death, Louie attended grade school in that city, but was forced, due to their financial status, to leave upon completion of the 7th grade. In 1919, he was a strong kid, full of enthusiasm for machinery, as he is today, and, in that year, he applied for, and got, a job at Seattle's Stetson-Ross Machine Works, as an apprentice at one dollar a day. Then came an hour which, to him, is considered strictly of the Red Letter variety.

WASHINGTON IRON WORKS, today a $5,000,000 organization, decided to build a new plant, after operating since 1889. Guided for years by the astute Gerald Frink, President, the firm, which now employs more than 600 people, had been handed down from son to son, and Frink felt that some expansion was needed to cope with the growing demand for improved engineering. Louie, just graduated from his apprenticeship, applied for a job. Still in short pants, the plant Superintendent looked him over, took in his square jaw, mussed-up reddish-brown hair and his thick wrists, grinned, and said: "Okay, but what did you ask me a minute ago?"

(*Continued on page 26*)

Here is the second, and final, installment of *Some Aspects of World Fisheries*, written by the noted biologist, Dr. J. L. Kask. Copies of the first issue may be had by writing Circulation Department, *Pan-American Fisherman* magazine, 205 Broadway Pier Building, San Diego, California.

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Some Aspects of WORLD FISHERIES

By DR. J. L. KASK

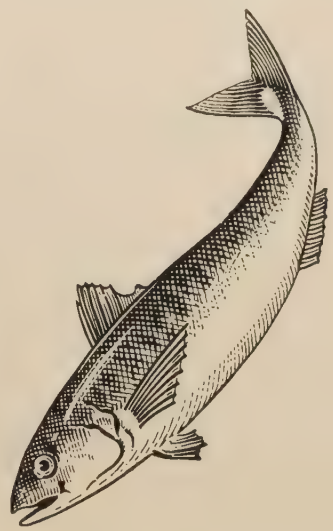
MANY indications exist that man is beginning to look seriously toward the seas after a long but understandable neglect.

In the United States, a million dollars was appropriated in 1948 for the "exploration, investigation, development, and maintenance of the fishing resources and development of the high seas fishing industry of the territories and island possessions of the United States in the tropical and sub-tropical Pacific Ocean and intervening seas." This is the first time in history that a million dollars has been appropriated for the development of a marine resource. This amount is small enough when compared with money spent for developments in agriculture, or even in subsidies for potatoes, but it is a good start. In the Philippines, the United States has been actively and generously helping with the rehabilitation and extension of their fisheries. This program includes studies in oceanography, in all its many branches, as well as exploratory fishing. The Fish and Wildlife Service itself has expanded its research and exploration activities both on the continent and in its territories, especially since the war. So have many of the individual states. We have already noted the formation of 5 International Fishery Commissions since 1925, three of which were negotiated last year.

THE United Kingdom, South Africa, Canada, Australia, India, Thailand, Japan and almost all maritime countries are in the process now of examining their positions with respect to fisheries with a view to expanding them.

During the last very few years, there have been at least 8 or 9 large modern fishery research vessels built and placed in operation. These are not replacements but are new vessels built for special research problems. Vessels built by Norway, the United Kingdom, South Africa were commissioned last year or will be commissioned this year. Several modern vessels have been provided for exploratory fishing by governments. Six or more, by the United States alone. This development is all post-World War II.

The development of the factory ship has made man physically independent of land. He can go any place in any ocean and stay out for long periods of time and bring back cargoes of perishable food in prime condition. There are 18 of these factory ships engaged in the Antarctic whaling right now and some of them are veritable islands of over 20 thousand gross tons.



During the last two or three decades, the governments of Canada, Iceland, Norway and Denmark have elevated their fisheries administrations to full departments or ministries. One, Japan, has very recently reorganized her fisheries and elevated it from a bureau to the rank of a vice-ministry. The United States, recognizing the international nature of sea fisheries, recently appointed a Special Assistant in Fisheries to the Under-Secretary of State, so that fishery matters could be dealt with at a high level and have established an office of Foreign Activities in their Fish and Wildlife Service. All this indicates that the further development of fisheries is being seriously considered.

When the founders of the Food and Agriculture Organization, a specialized agency of the United Nations dealing with problems of world food, were preparing a blueprint of this new body, they provided for a separate Division of Fisheries. This fact in itself granted fisheries the status of an important world resource. It also spoke well of the wisdom and the vision of the founders. FAO, as this agency is familiarly known, has already organized, as we have seen, the Indo-Pacific Fisheries Council with 14 member nations in South East Asia, and is in the process of constituting another similar control in the Mediterranean area. It proposes to follow the same process in other large but ecologically comparable ocean areas of the world where provision for cooperative research and development do not presently exist.

With fishing and processing, much progress has also been made in recent years in the development of equipment for the study of the oceans and the animals that live in it. These developments have not only helped ocean research but they have revolutionized it. The echo sounder can map the contour of the bottom of the sea as fast as a ship can travel. This same instrument, aided by other electrical devices, can detect shoals of fish both vertically and horizontally in mid-layers of water where formerly they weren't even known to exist. Underwater photography is helping man to look at an environment from which he is otherwise barred. Capable technicians are spending their full time, for the first time, developing and improving instruments to study currents, and to take temperatures and plankton samples, water samples from any depths and other needed observations quickly and accurately, and the research vessels themselves are being specially built for this purpose and are equipped with modern living as well as investigational facilities.

(*Continued on page 25*)

San Diego Observer

By SEYMOUR FRANCIS

I UNDERSTAND that a report to Mayor Bowron and the city council on the progress of Los Angeles harbor during the last fiscal year has just been forwarded to city officials by the board of harbor commissioners. The 1949 report includes a history of the harbor since its discovery by Juan Rodriguez Cabrillo in 1542. Special articles have been written by James C. Ingebretsen, president of the harbor board; E. C. Earle, chief engineer; Tom Maddox, traffic manager; Stanley Olafson, manager world trade department, chamber of commerce; and Admiral Frank D. Higbee, port warden. In the harbor progress article, Ingebretsen says:

"Some adverse influence stemming from the war, which left their mark on trade at Los Angeles harbor, and others normal to peacetime combined to bring about a minor slowdown in port traffic. Without these, the upsetting communist surge in the Orient and the long, crippling Hawaiian and Pacific coast strikes, port commerce probably would have shown a gain over 1947-48. As it was, tonnage at the harbor in 1948-49 totaled 17,115,867, compared to 17,988,872 in 1947-48 or a decline of 873,005 tons, while dollar revenue of the port, totaling $3,941,078, was off only $49,938 from the preceding year. However, when the sole measurement of dollars and tons is laid against the adverse economic and political factors of the year, the conclusion becomes evident that without these trade restrictions the year just past again would have registered the steady upward traffic trend of normal peacetime years.

"Hawaiian tonnage in 1948-49 was off 100,000 tons to a figure of 577,165 tons, while foreign trade tonnage, totaling 1,741,247 tons, was down more than 200,000 tons. In another classification, intercoastal tonnage, the 1948-49 figure of 548,645 tons was off nearly 400,000 tons. Coastwise tonnage showed a decline of approximately 200,000 tons. Despite somewhat adverse trade trends, the figure of total tonnage handled at the harbor since 1855 now is close to the 600 million ton mark. Thus we find in 1948-49 that general cargo at Los Angeles harbor increased 167,647 tons to a total of 2,672,273 tons. This demonstrates the ever-increasing importance of Southern California in the general trade picture of world commerce, coming as it does in the face of declines in other classifications. "For instance," Ingebretsen pointed out, "lumber traffic was off 78,839 tons in 1948-49 to a total of 204,243 tons, while bulk petroleum, excluding bunkers, declined 640,190 tons to a figured of 12,272,503 tons, compared to 1947-48. Bunkers were down 417,538 tons to a total of 1,966,848 tons in 1948-49. Again, much of the decline can be attributed to inetrruptions in normal trade through such adverse factors as strikes and foreign political threats to commerce."

"No review of freight movement in a harbor would be complete without directing attention to the economic health of the harbor, itself. In this respect, Los Angeles harbor presents a sound, constructive appearance. A study of the harbor's financial report discloses that the year 1948-49 showed receipts only a few thousand dollars under the previous year, despite a large proportionate decline in traffic. That dollar revenue, previously referred to, held up so well is largely the result of the dynamic Southern California economy. Oil royalties derived from valuable oil reserves within harbor confines increased nearly $100,000 to a figure of $716,954 in 1948-49, offsetting declines caused by a slowdown of freight traffic. For industry and transportation, this financial stability is a blessing not enjoyed by all harbors and insures the user of the port that in spite of minor interruptions in trade and traffic the Los Angeles harbor management is enabled to proceed with proper maintenance and harbor development without financial restrictions."

EBB'N FLOW

(*Continued from page 7*)

the application a thirty-year lease was requested, which would yield a revenue of about $30,000 annually to the port's income.

DIED

Mrs. Mary Silva:

Mrs. Mary Monise Silva of San Diego, California, collapsed of a heart attack in her Point Loma district home last month, and, a few moments later, she was dead. A religious, philanthropic and civic leader, she was one of the most widely-respected women in this southern city, and a member of one of the tuna industry's pioneer families, the Monise's. She left her husband, Joseph J. Silva; two daughters, Mrs. Tiago Goularte and Mrs. Frank Medina; three nieces, Mrs. Ernest Monteiro, Mrs. Rita Bellatore, and Miss Angie Vierra; two brothers, clipper Captains Joe and Mathew Monise, and three grandchildren, Tiago Goularte, Jr., Carol Medina and Bobbie Bellatore.

Mrs. Silva was a member of St. Agnes church parish, and was affiliated with S.P.R.S.I., Catholic Daughters of America; Cabrillo Service Club, Portuguese-American Social and Civic Club and United Portuguese S.E.S. Requiem Mass was celebrated at St. Agnes on June 7; interment followed at Holy Cross.

GOOD NEWS

Downhold:

Substantially lower air freight rates on seafood were in effect on eastbound shipments from nine western cities to major mid-west and eastern communities served by United Air Lines. According to E. L. Dare, manager of air cargo sales, the rates are designed to stimulate volume of eastbound shipments which historically has been lower than that of westbound traffic. Reductions do not apply on distances of less than 650 miles. Reductions on seafood include:

A 20 per cent rate cut from Los Angeles, Long Beach, San Francisco, and Oakland to Chicago, Milwaukee, South Bend, Toledo, Detroit, Akron-Canton, Cleveland, Philadelphia, Newark-New York, Hartford-Springfield, Providence and Boston; a 40 per cent rate cut on shipments from San Diego and a 15 per cent reduction on shipments from Denver to these same cities; a 28 per cent reduction on eastbound shipments from Portland and Seattle-Tacoma to Chicago, Milwaukee, Detroit and Newark-New York. United operates 26 daily eastbound all-cargo and combination passenger-cargo flights from the West Coast and Denver to mid-west and eastern cities affected by the rate reductions.

UNDER ONE ROOF

Consolidation:

A consolidation of all sales activities for Westgate-Sun Harbor Company in the firm's new executive offices at San Diego, California, effective July 1 was announced today by Wade Ambrose, president.

"With completion of new offices at our main plant in San Diego, an improved sales service to customers throughout the country will be possible by consolidating all activities there," Ambrose said. Marvin Loughbom, sales manager, who supervises all direct sales for the company, will move his office to the San Diego plant when the Los Angeles branch closes July 1, Ambrose said.

EXPANSION

NCA:

The canning industry dedicated in Washington, D. C., a new million-dollar research center designed to continue scientific studies aimed at maintaining and improving the purity and wholesomeness of canned foods. The new building provides modern facilities for the research laboratories of the 43-year-old National Canners Association, which was the first national trade association to establish a laboratory solely for its industry's research and technical problems. The building also contains new facilities and equipment for other specialized activities of the Association which include development of recipes and consumer information to aid the housewife, programs directed towards constant improvement of canning crops, economic and statistical surveys and reports, and the dissemination of information on canned foods to industry and public.

Conference:

The dedication climaxed a week-long series of meetings in Washington, and was attended by some 450 executives of the canning industry and allied industries.

Architecture

National Canners Association's new building, Washington, D. C. (See "Expansion," this page).

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EDITORIAL

(*Continued from page 4*)

Stabilization Corporation, which shall be an agency and instrumentality of the United States, within the Department of the Interior, subject to the general direction and control of the Secretary.

(d) The Director shall be advised by a board of advisors, which shall be composed of twenty-two members as follows: The Director of the Fish and Wildlife Service, who shall be the chairman of such a board; the Chief of the Division of the Fishery Biology, the Chief of the Division of Commercial Fisheries, two other employees of the Fish and Wildlife Service, to be appointed by the chairman; and fifteen members to be appointed by the Secretary, of whom *seven shall be fishing boat owners, two shall be primary* shippers of fish, *two* shall be secondary wholesalers of fish, *two* shall be retailers of fish, *two* shall be representatives of labor, *two* shall be representatives of consuming public. The members of the board of advisers not otherwise employed by the Government shall receive such compensation, not to exceed $50 per day each, while actually employed, and such travel and subsistence expenses or per diem allowance in lieu thereof, as may be fixed by the Secretary. The board of advisers shall meet when called by the Secretary but not less frequently than twice a year. At least once each calendar year it shall submit to the President for transmission to the Congress a report covering its activities of the Corporation.

(e) *The Secretary may appoint such officers and employees of the Corporation as may be necessary for the transaction of its business without regard to the civil-service* laws and regulations. PROVIDED, That the compensation of such officers and employees shall not exceed the compensation of officers and employees of the executive agencies of the Government who have similar authority and fulfill similar duties.

(f) *The Corporation may establish national or regional committees of producers or wholesalers of fish or fish products* for the purpose of assisting in the administration of the programs of the Corporation, and it may make payments to such committees to cover their administration expenses in rendering such assistance.

POWERS OF THE CORPORATION

Sec. 202. The powers of the Corporation shall be as follows:

(1) It shall have succession in its corporate name.

(2) It may adopt, alter, and use a corporate seal.

(3) *It may enter into contracts, or appoint agents, to do anything authorized under this Act. State and local regulatory laws or rules shall not be applicable with respect to contracts of the Corporation or the parties thereto to the extent that such contracts provide that such laws or rules shall not be applicable, or to the extent that such laws or rules are inconsistent with such contracts.*

(14) *It may, after obtaining the views of the board of advisors and with the approval of the Secretary, support the prices of fish and fish products through loans, purchases, and other operations.*

(15) *It may package, process, manufacture, can, freeze, store, and transport any fish or fish products acquired by it or required by any other agency of the United States.*

(16) *It may make available materials and facilities required in connection with the production and marketing of fish and fish products.*

(17) *It may procure fish and fish products for sale to other Government agencies, foreign governments, and domestic, foreign, or international relief or rehabilitation agencies, and to meet domestic requirements.*

(18) *It may remove and dispose of or aid in the removal or disposition of surplus fish and fish products.*

(19) It may increase the domestic consumption of fish and fish products by expanding or aiding in the expansion of domestic markets or by developing or aiding in the development of new and additional markets, marketing facilities, and uses for such commodities.

(20) *It may export or cause to be exported, or aid in the development of foreign markets for fish and fish products.*

RUST STOPPED!

DURING JUNE

On the Tuna Clippers:

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RAY DICKSON
General Sales Manager

PRESS-O-GRAMS

(*Continued from page 8*)

ruga and family enjoyed a two weeks vacation of hunting and fishing in Idaho. . . . Eddie's brother, Anthony, and his wife, have purchased a cabin at Gull Lake, or, as it is jokingly called on the waterfront, *Port-u-gull*!

Devon Oliver presented her husband, Richard, with a baby girl June 8th. Marie Lelani weighed 7 pounds, and has been nicknamed Lonnie . . . another proud father is Phillip MacIntosh, customs patrol officer at the boarding dock. Phillip Eugene Jr. weighed in at 8 pounds 1 ounce on June 12th. . . . Don't forget to listen to *Voice of the Fisherman* KSD, 9 p. m. Sunday evenings for up to the minute waterfront news and expected arrivals, and *Tuna Tune Time*. 9:30 to 10:00 and *Theme Time*, 7 p. m. Thursdays, same station.

FIT FOR A KING

(*Continued from page 11*)

In the canning of crustacea, it is common practice to treat the meat with an organic acid, such as acetic or citric, in order to minimize the possibility of discoloration of the meat due to the formation of iron sulfide. The meat may be treated either by dipping in a dilute solution of the acid or by adding an acid solution directly to the can. The final product should be slightly acid with a pH or 6.4 to 6.6. The following treatments were tried with experimental packs of king crab meat and proved to be satisfactory:

1. Meat was dipped for 15 seconds in a solution of 2 ounces of glacial acetic acid to 1 gallon of water (approximately 1.6 percent acid by weight). Using 30-gallon batches of dip solution, 2½ ounces of glacial acetic acid were added after every 100 pounds of meat dipped. Proportionate amounts of acid should be added for a smaller volume of solution.

2. Meat was dipped for 15 seconds in a mixture of 27.5 ounces of saturated citric acid solution and 30 gallons of water (approximately 0.4 percent acid by weight). Nine ounces of saturated citric acid solution were added after every 100 pounds of meat dipped.

3. To each half-pound can was added 20 cc. of a solution of 1.5 ounces of glacial acetic acid, 14 ounces of salt, and 1 gallon of water. This solution is approximately 1 percent acetic acid and 10 percent salt by weight.

4. To each half-pound can was added

(*Continued on next page*)

Milady

By DOROTHY HARVEY

I'M told that the new headquarters and laboratory building of the National Canners Association, 1133 20th Street, N. W., Washington, D. C., is a modern three-story structure of 36,000 square feet of gross space on a rectangular lot of 120 x 140 feet, and is really a honey. (See "Ebb'n Flow"). The building is "L"-shaped, with a frontage of 95 feet on the east side of 20th Street and a depth of 140 feet 10 inches along an alley north of and adjacent to the N.C.A. property. Along 20th Street, on the short leg of the "L," the building is 50 feet deep, and on the long leg of the "L" it is 50 feet wide. The area not occupied by the building is blacktopped and fenced and is used for parking for N.C.A. and employees' vehicles. The building is of reinforced concrete construction, with stone facing on 20th Street, and brick on the other exterior walls. It is air-conditioned, has fluorescent lighting, and has an elevator for both passengers and freight. The interior is largely open office space, with only limited use of ceiling-height partitions. Visitors, of course, find information at the telephone switchboard located adjacent to the lobby at the first floor main entrance.

In addition to the secretary and his staff, I learn that the first floor contains offices for the Office of the Treasurer, the Information Division, Labeling Division, Fishery Products Division, Raw Products Bureau, and the Division of Statistics. A feature of the first floor is a conference room with a seating capacity of 95. Adjoining the Office of the Secretary are two small private workrooms for the use of canners or for conferences among a few persons. The second floor is shared by the Claims Division, Home Economics Division, and the administrative offices of the Washington Research Laboratories. A large library room also is on that floor. A feature of the Home Economics Division layout, and one that particularly interests me, is a modern duo-kitchen for the development of both family-size and institutional recipes and a combination dining and photography room for group testing of recipes and the preparation of food photographs. The dining room also may be used on occasion as a conference room or for lectures to various groups interested in dietetics and nutrition. Except for two offices for laboratory division heads, the entire third floor is devoted to laboratories and their supplemental service areas. The division of space and design of facilities have been made in accordance with the several functions of the Research Laboratories—bacteriology, processing, chemistry, nutrition, sanitation, waste disposal, and microanalysis.

Units using like equipment are grouped; for example, the chemistry, nutrition and waste disposal-sanitation laboratories, comprising nearly half the direct laboratory area, are in a single continuous space marked off by barriers such as hoods or storage cabinets instead of partitions. Similarly, the bacteriological laboratory is divided into two sections, one for service and one for research, by a row of incubator cabinets accessible from both sides. A separate cutting room permits examination of large groups of samples without interference with other laboratory work. The basement space, aside from the heating, air conditioning and general service areas, is divided between the Laboratories (pilot plant and storage rooms) and the mail and duplicating service, including storage of stationery and supplies. Sure like to see it.

•

HATS off to *Woman's Day* magazine. In line with other national publications which, of late, have been devoting space to fish cookery, this magazine, in the May issue, really joined the boost. And it went to town, believe me! Starting on page 57 of the issue, it sweeps into 47 recipes calculated to make fish a favorite dish with your family. Again, hats off to *Woman's Day!*

FIT FOR A KING

(*Continued from page 17*)

20 cc. of a solution of 1.3 ounces of saturated citric acid solution, 14 ounces of salt, and 1 gallon of water. This solution is approximately 0.7 percent citric acid by weight.

Comparison of sample packs by a laboratory taste panel indicated no marked preference for the flavor of the meat treated by any of the four methods. Only slight preference was shown by acid-treated packs in comparison with packs in which the acid treatment was omitted. Use of higher acid concentrations caused a pronounced acid aftertaste in the product. In no case did the use of added acid or acid dip appear to improve the color ratings of the samples when compared to experimental packs in which the acid treatment was omitted. Discoloration of the meat because of coagulated blood and protein curd was found uniformly regardless of acid treatment.

In using dip solutions, the proper concentration of acid must be maintained by replacing the acid absorbed by the meat. For best results, acetic or citric acid dip solutions should be discarded after 400 to 500 pounds of meat are dipped per 30 gallons of solution. The meat should be allowed to drain thoroughly before dipping in brine. If treatments number 3 or 4 are used, in which the acid and a brine solution is added, it is not necessary to season the meat in a separate step.

To season the product, the leg meat should be dipped for 15 seconds in a strong brine (90° salinometer or 24 percent salt by weight) made up with a high grade of salt. After the meats have drained adequately (approximately 5 minutes), they may be packaged for freezing. The body meat is not dipped in brine because it would absorb an excessive amount of salt for flavoring. Sufficient salt is absorbed by the leg meat to flavor the entire product. In the case of canned crab, brining usually follows the acid dip.

One experiment was made aboard a vessel in which meat from the cooked king crab was packaged in number 10, friction-top cans, and held in crushed ice for 10 days. The meat was then repackaged in smaller containers, frozen, and stored at 0° F. Examination of the meat after arrival in port showed that a pronounced off flavor and odor due to incipient decomposition had developed, making the meat inedible. This was attributed to changes during the holding period in ice.

KING crab meat is much more suitable for freezing than the meat of several other species of crab. Experimental packs of king crab meat stored at 0° F. for one year have been found to compare favorably in regard to flavor and texture with samples stored only two months. On the other hand, frozen dungeness crab meat when packaged in cellophane was unapalatable after storage for three months. Two important factors which lower the quality of the frozen king crab meat during storage at 0° F. are changes in color and in texture. Crab meat which has been carelessly cleaned or washed is apt to show considerable bluish discoloration after processing. Crab meat which has been packaged loosely with considerable air spaces in the package is likely to turn yellowish. The use of an impure grade of salt in making brines for flavoring or for adding to the meat in the package will cause yellowing of the meat after long storage periods. Only high grade salt, such as that specified for mild-curing salmon, should be used in preparation of the crab meat.

The second factor causing a loss of quality is that due to toughening of the meat. In order to minimize both toughening and discoloration, the crab meat should be packaged tightly in a moisture-vapor proof container. Air spaces may be further eliminated by flooding the meat with pure water or, preferably, with a 2 to 3 percent salt solution.

Storage of frozen crab meat a higher temperatures of 10° to 15° F. caused undesirable texture changes and excessive "drip" on thawing compared to packs stored at a relatively constant temperature of 0° F. For prolonged storage up to 1 year a temperature of 0° F. or lower is most desirable.

King crab meat may be frozen in the shell, that is, the whole crab legs are frozen after butchering and cleaning. Although desirable for certain markets, king crab frozen in the shell is not as satisfactory for long storage as the packaged meat. Experimental samples of crab legs *cooked* before freezing have been stored at 0° F. for periods up to six months without marked changes in flavor and texture. A slight toughening of the meat and increased difficulty in removing the meat can be expected in lots stored for long periods. Only crabs in which the legs are plump and well filled should be utilized. Older crabs, whose shells do not indicate a moult for some time, are usually thin and have meat of poor quality. Crabs which exhibit evidence of a recent moult are apt to show poor recovery of meat. These should not be frozen.

The freezing and storage of *raw* crab

(*Continued on page 22*)

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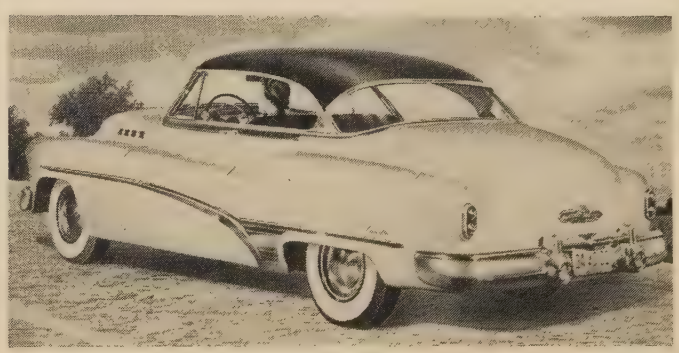

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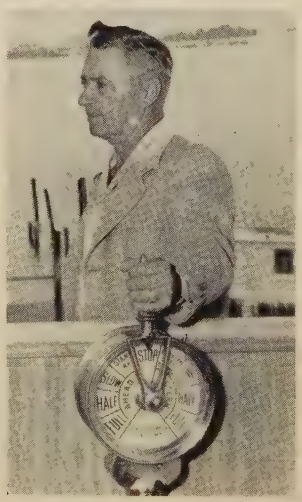

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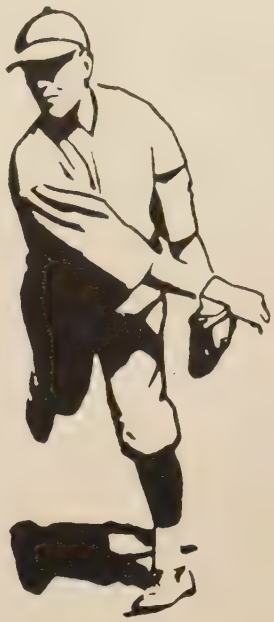
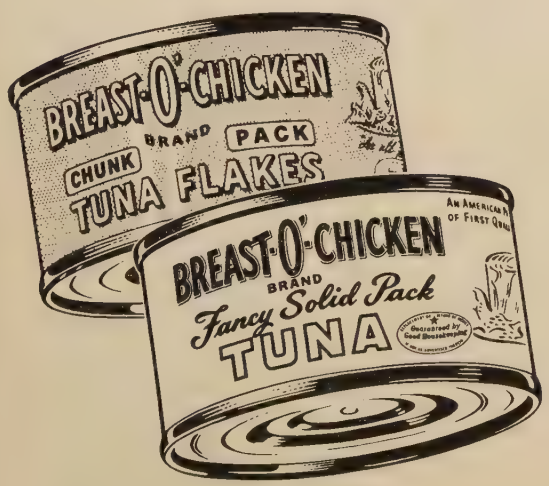


You know that it takes more than a pitcher to win a ball game. He has eight men to help make plays, get hits, run bases. Working together, as a team, they *all* win.

The tuna business takes "team play" too!

Just think of all the various elements in the tuna business, every *one* of which is necessary to the success of the others. The boat owners, the fishermen, the cannery workers, warehouse crew. The big packing plants and plant owners, the food brokers, the retail stores.



It takes team play by all these various parts of the industry for each one of them to succeed. This team play . . . everybody working together . . . enables the American tuna industry to give the housewives of this nation a finer product at a reasonable, competitive price. *When she buys tuna . . . we all win.*

When everyone PROFITS, an industry PROSPERS

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FIT FOR A KING

(*Continued from page 18*)

legs is not recommended. After a short storage period of only three months, the raw meat becomes discolored and off-flavored. In addition. the raw meat is difficult to remove from the leg segments as it adheres tightly to the shell. Cooking the raw crab legs after freezing and storage increases the difficulty of removal of meat. The texture of such crab meat is inferior and is apt to be soft and slightly "mushy." After freezing, the cooked crab legs should be ice glazed for storage; otherwise moisture is lost rapidly through the shell and texture and flavor changes will soon render the meat inedible.

Legs which have been cooked, frozen, and glazed aboard ship may be thawed to allow removal of the meat for packaging or canning. This offers possibilities for refrigerated fishing vessels that do not have facilities for further processing aboard. One objection to holding large quantities of frozen king crab in the shell aboard the vessel is that the pay load will be relatively small, inasmuch as the legs are bulky per unit of weight. At least 100 cubic feet of space per ton of crab legs are required for storage. The yield of butchered crab legs is approximately 50 percent meat by weight. Experimental packs of both packaged frozen crab meat and canned crab meat prepared from the frozen crab legs have been found to yield acceptable products. The meat from frozen legs utilized in this manner should be carefully inspected for discoloration or off flavors.

The final steps in canning king crab meat include filling the can, inspection, vacuum sealing, retorting, washing, and cooling. The standard "½-pound-flat" can with "C" enamel, seafood formula,

is recommended for king crab. A fill of approximately 8 ounces is necessary in order to yield 6½ ounces of meat, drained weight. A vegetable-parchment paper liner is desirable but is not necessary. It must be emphasized that careful cleaning and packing of the meat is of primary importance for consumer eye appeal. Layers of leg sections on the bottom and top part of the can should be arranged uniformly. The body and broken leg meat is used to form the inner layer. The filled cans should be carefully inspected before sealing.

A vacuum sealing machine is recommended, but if one is not available, the cans may be clinched loosely and given a steam exhaust of 7 to 10 minutes at 212° F. before sealing. The sealed cans should be retorted as soon as possible. Several smaller retorts in the cannery are preferable to one large retort in order to allow more frequent cooks during the day. A processing temperature of 230° F. (6 pounds steam pressure) for 75 minutes is recommended. Higher temperatures tend to affect adversely the color and flavor of the product. After processing, the cans should be cooled quickly in order to prevent deterioration in quality. The hot cans should be washed quickly in a detergent solution to remove grease and foreign matter, rinsed, and plunged immediately into cold water. The cans may be stacked for drying in circulating air while slightly warm.

THE production line for processed king crab should be a flexible unit adaptable to the handling of a highly perishable product. Undue delays at any point because of "bottlenecks" will cause loss of quality in the finished product. During periods of heavy fishing production it is recommended that packers do not lower the standards of the processing in order to increase the capacity of the production line.

In general, the quality factors which have been enumerated are mainly those which depend on the experience and judgment of the operator. A specialty product, such as, canned or frozen king crab should be processed only under the highest standards in order to develop and maintain a permanent consumer market. It is unlikely that king crab will be produced cheaply under American labor standards, especially in view of the fact that the fishery lies far from the large Pacific fishing ports in areas of inclement weather. Only by keeping the interests of the developing industry in mind can one justify the increased cost of operation which is necessary if king crab is to be processed according to the high quality standards recommended. A reputation for quality established by the pioneers in the field will do much to maintain the stability of the industry in the future.

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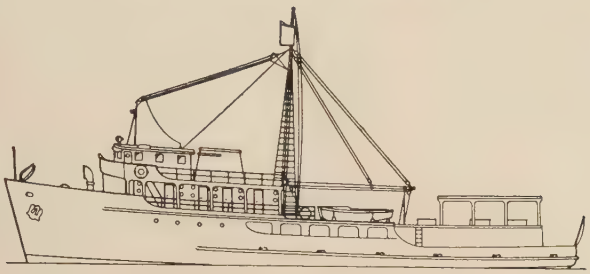

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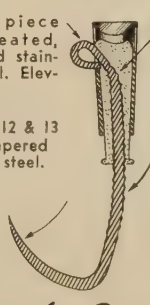

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GOLD RUSH

(*Continued from page 9*)

ing in 1948 were either not present or the fish were not taking the lures offered.

The first albacore were caught in a test of the trolling gear on August 9, approximately 50 miles WSW of Cape Flattery. Four days later, upon returning from an unsuccessful attempt to obtain bait at Grays Harbor, tuna were again found to be concentrated in the same general area. The position and extent of the school were broadcast to the fleet, and subsequent reports indicated good catches were made in the area the following two days.

During the week of August 18 to 25, fishing was very slow off Vancouver Island and the Queen Charlottes. Several schools of tuna were sighted off Cape Cook and Cape Scott, but the fish were moving too fast to be approached for chumming with live bait.

Water temperatures were considered favorable (58°-60° F.), and feed appeared to be abundant in spots; but the tuna were not striking the trolling gear. During this period, other tuna boats reported fish off the Queen Charlottes, with only fair catches being made. Scattered fish were taken by the *Oregon* over the Dellwood Hills, a shallow area off the northern tip of Vancouver Island.

On August 28, the *Oregon* set a course WxS of Cape Muzon, Dall Island, and ran 300 miles offshore. Water of 58° F. was reached in the vicinity of the Dickins Seamount, approximately 150 miles offshore, but no tuna were encountered until the Welker Seamount (55° 10′ N. lat. 140° 20′ W. long.) was reached on August 30. Several large albacore were caught on the trolling gear in 57.5° water in the afternoon. It appeared these were scattered fish, as they were all caught singly, and no school could be located in the area during that day or the day following.

EXPLORATIONS were carried out in Alaskan waters during the following week as far north as Sitka. Surface temperatures were generally cold, and no tuna were seen or caught until the Dickins Seamount was again reached on September 4. Scattered fish were taken off Dixon Entrance and Graham Island on September 4, 5, 6, and 7, but at no time were any large schools encountered. On moving south off the Queen Charlottes, a definite offshore movement of the warm current was noted in the next several days, and no tuna were caught from Tasu Sound south until the Dellwood Hills were reached. On September 11 and 12, fairly good fishing was found in the Dellwood Hills area, 40 tuna being taken on September 12. The fish appeared to be in small schools and scattered over an area of several square miles. Throughout this exploratory work, no attempt was made to catch large quantities of tuna. When schools of tuna were located, only a sufficient number was taken to permit evaluation of the area being fished, and develop accurate reports for the commercial tuna fleet.

Despite a series of southeast storms which kept offshore operations at a minimum from the middle of September on, exploration was carried out until October 6, but no tuna were taken after September 12. A cruise 60 miles off Cape Ommaney on September 26 yielded no sign of tuna. Water temperatures were low (52°-54.5° F.), and no blue water was found.

Taking advantage of moderate northerly and westerly winds on September 29, a course was run 252° M. from Cape Ommaney to a position 150 miles off Baranof Island, with no indications of albacore encountered. Maximum surface temperature was 54.5° F., the water was green over the entire course, and no feed or feeding birds were seen. Exploration in the vicinity north of the Dickins Seamount on October 5 and 6 yielded no further encouraging signs, and operations were terminated on October 6.

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SOME ASPECTS

(*Continued from page 13*)

And finally, as the need for information of the sea grows and as the equipment and the support worthy of the magnitude and the urgency of the problem are forthcoming, there is a further requirement for men. Explorers with great curiosity and imagination and with the courage and vision of pioneers are needed, but in addition to these qualities, it is necessary too that these new leaders have a thorough grounding in scientific discipline, a complete understanding of the principles already developed and a knowledge of previously accumulated information.

For men and women with the first qualifications there is no lack, although they aren't as common as we would like to think; but men highly trained in the field of oceanography in its many branches are very few. There are more jobs now than there are qualified people to fill them, and if the field develops, as it certainly must, a great many more well trained people will be required. But there are indications that these will be supplied, too.

ONE indication of this is the organization of the Department of Conservation at Cornell University, which teaches resources management in general, and includes in its curriculum special courses in fisheries. I have heard, and I hope that this is true, that further courses in this field are contemplated. There has been a special School of Fisheries at the University of Washington since 1919. This school has trained a surprising number of the men active in fishery research and administration in the United States now, and has exerted a great influence on the trend of fisheries activities both in this country and abroad. This year, this school is moving into a new million dollar building.

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BIANCHI

(*Continued from page 12*)

"I asked if you could use a good man," replied Louie.

"Where is he?"

"Right here!" snapped Louie. "You're looking at him."

"Well, we're going to build something called a Diesel engine. If you are interested, we'll put you on the floor as a helper to build this so-called affair. And when there is an opening, maybe we can use you on one of our other machines."

One of the first men at Washington Iron Works to work on the Diesels, Louie began to breathe, eat and sleep the units, and, with exception of one instance wherein, in 1932, he took leave of absence to work as Chief Engineer for the Diesel power plant at Ranier National Park, he has worked on Washington Iron Diesels since. He has been a Field Engineer since 1936, and has represented his company all over the States, and in Alaska. One of his primary functionings, in addition to providing the necessary trouble-shooting for customers, is public relations. On that subject, it probably would be difficult for his firm to replace him. Possessed of a remarkably acute memory for faces and names, it is doubtful if he has made an enemy since he was born.

For example, in Guaymas, Sonora, Mexico, recently, to attend the *Fiesta de la Pesca*, he wasn't in town two days before he had made friends with a number of Mexican nationals, none of whom could speak English. It was one and the same with Louie, however. He couldn't speak Spanish, either, and, as the result, each talked his own, waved his arms, and all got along fine. His other friends and acquaintances include fishermen, newsboys, janitors, vice-presidents of various firms, insurance men, shoe salesmen and ship builders, and he numbers them in the hundreds.

ALL of his brothers are alive, now with families of their own, and living in Seattle. As the result, Louie's family life still is extensive and warm. His immediate family include his wife, the former Angie Banchero, whom he married in 1927, and three daughters, Louise, 18, Barbara, 16, and Carol, 10. He lives in a beautiful Georgian-type home with 1,600 square feet of floor space, complete with patio. It is located in the Jefferson Park district.

When he is at home, his favorite recreation is pressing his daughter, Louise, into playing the piano. The young lady is a student at University of Washington, and is majoring in music. Louie is

a member of the Propeller Club of the United States; The Society of Port Engineers of Puget Sound, (Washington State), and the Italian Club, Incorporated of Seattle. He admits that he doesn't care to take time for extensive reading, and goes only occasionally to movies.

"People are my hobbies," he says. "People and Diesels." To that observation, it can only be added that he has proved, since coming to this country as a little Italian immigrant, his point.

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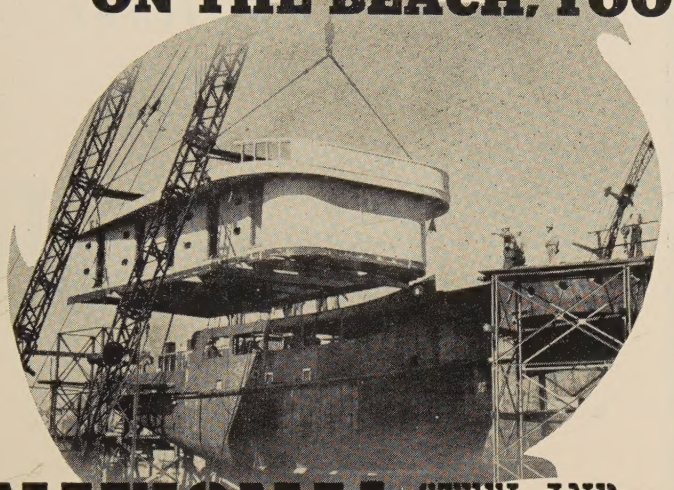

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